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Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	WT Docket No. 98-143
1998 Biennial Regulatory Review --	)	RM-9148
Amendment of Part 97 of the Commission's	)	RM-9150
Amateur Service Rules.	)	RM-9196

To: Federal Communications Commission

COMMENTS OF:

I, John R. Sproat, Jr., residing at 1419 East Manasota Beach Road, Englewood, Florida 34223-6341, file these comments on 13 November 1998 in the Commission's Notice of Proposed Rulemaking, WT Docket No. 98-143. I am of the opinion that changes in the Amateur Radio licensing procedures must be made to simplify the examination process and also to have the examinations better reflect contemporary communications practices. I believe that young people are discouraged from seeking an Amateur Radio license because the present testing procedures involve mastery of antiquated technology which may have historical value, but is irrelevant in today's world. With the average age of the American amateur approaching 60 years, Amateur Radio will soon become an impotent factor in the USA if such young people cannot become interested in the Service.

I have held an Amateur Radio operator and station license continuously since 24 September 1954, when I was first licensed as a Novice. I received my General Class license 14 September 1955 and, after an hiatus of some 13 years from amateur radio activity, my Advanced Class license on 08 April 1977. My Extra Class license was earned on 21 March 1987. I also held Amateur Radio licenses while living in Indonesia (1979-1983 and 1991-1996) and Jordan (1987-

1989). Upon retirement and return to the United States in 1996, I joined the Englewood Amateur Radio Society (of which I am now president) and became certified by the American Radio Relay League (ARRL)--of which I am a Life Member--as a Volunteer Examiner. Therefore, I am familiar with amateur radio licensing procedures in the USA, Indonesia and Jordan. I offer herewith my comments on the questions the FCC has raised concerning restructuring the Amateur Service.

I. NUMBER OF AMATEUR SERVICE LICENSE CLASSES

I believe that the present six classes of licenses and eight different examinations are excessive. Furthermore, I believe that the present "entry-level" examination for a Technician Class license is excessively difficult in consideration of the limited benefits received. I believe that there should be only three (3) license classes: Entry, Intermediate, Extra.

ENTRY CLASS: This class license would offer VHF/UHF privileges on all amateur bands above 30 mc. with a power limitation of 200 watts, and no requirement for Morse, i.e., similar to the present Technician Class license. However, I am not in agreement with the study requirements for the current Technician license. As best I can recall, when I took my Novice Class exam in 1954 (that grade of license then was only good for one year and non-renewable) there were no more than 20 or 25 questions in the written exam. The ARRL study guide back then offered only a few more sample questions than were to be found in the actual examination. That was in an era when most Novices either converted World War II surplus "command sets" to transmit in the Novice bands or built transmitter kits, so the knowledge of circuitry was important.

There are now 35 questions in the Novice exam and 65 questions in the Technician Class exam. The question pools for these exams require that the

candidate master at least 10 times as many questions as will be asked in the examination. I think this is an excessive requirement, especially considering that everyone now uses equipment purchased off the shelf. I have experienced potential license candidates giving up in frustration over the amount of study (memorization) required. I believe the entry level examination should return to its former simplicity, i.e., in the range of 25 questions, drawn from a pool of some 50 questions, and be relative to only the privileges of the class.

INTERMEDIATE CLASS: This class license would offer all VHF/UHF privileges and HF privileges matching the present Advanced Class frequencies, full legal power levels, and (while still required by international agreement) 5 words-per-minute Morse. The written exam should contain approximately 50 questions, drawn from a question pool of not over 125 questions.

EXTRA CLASS: This class license would offer the privileges of the present Extra Class license. The written exam should contain approximately 70 questions, drawn from a question pool of not over 150 questions. While still required by international agreement, 5 words-per-minute Morse should be required.

II. IMPORTANCE OF THE NOVICE CLASS LICENSE

The Novice Class is no longer the favored license for entry into amateur radio, however, it is a viable means for a new amateur to operate phone on 10 meters with the minimum amount of examination. While no new Novice licenses should be granted, I believe that existing Novices should be able to renew their licenses until they upgrade. Having already passed 5 wpm Morse, Novices should be able to upgrade to the above-mentioned Intermediate level by taking the written examination for that license.

III. DISPOSITION OF THE NOVICE BANDS

I agree with the FCC's position that the existing Novice Morse subbands be deleted and that Novices could operate Morse anywhere in the 80, 40, 15 and 10 meter bands. However, I also believe that those Novices should not loose their current phone privileges from 28.3 to 28.5 mc on 10 meters. Power limitations of 200 watts should remain in effect.

IV. DISPOSITION OF THE TECHNICIAN PLUS LICENSE CLASS

Prior to 21 March 1987 the written examination for Technician and General Class licenses was identical. Having already passed 5 wpm Morse, Technicians licensed prior to that date should be granted the above-mentioned Intermediate level license. Having already passed 5 wpm Morse, holders of Technician Plus license should be able to upgrade to the above-mentioned Intermediate level by taking the written examination for that license.

V. ADVANCED CLASS VES FOR GENERAL CLASS EXAMINATIONS

As Extra Class VES conduct the examinations for candidates for the Extra Class license, I see no reason why properly certified Advanced Class VES could not examine candidates for General Class or, for that matter, Advanced Class licenses.

VI. PHASING OUT RACES STATION LICENSES

I agree with the FCC's position that it is unnecessary to have a RACES license with a separate and distinct callsign, considering that the majority of stations participating in RACES activities are devoid of such callsigns.

VII. ENFORCEMENT IN THE AMATEUR RADIO SERVICE

There's no doubt that a minority of amateurs can and do cause disruption to the normal course of communication on the amateur bands. Foul language, which we would never dream of using "in the old days", is often heard. Out-of-band operation by American stations in the 40-meter DX phone band is not uncommon. "Last two letters only" is a common request by DX and list takers, however, it is illegal to not give proper, complete identification for your station. Operation by unlicensed foreign phone stations on the 10-mc WWV standard frequency and just inside the 7 mc Morse band are problems that require international cooperation between governments.

Over the past decades, the FCC has operated with reduced manpower such that a visit by an FCC engineer to an offending amateur station is rare enough that such an event makes the amateur radio newsletters and magazines. Field monitoring stations have been decommissioned around the country. I've heard nothing regarding the success of the "Amateur Auxiliary". I read now, however, that on 01 October FCC Chairman Kennard stated that, inter alia, "those who are licensed to use it (radio spectrum) can do so free of unwarranted interference". He also announced creation of a new Enforcement Bureau to "..provide swift and effective enforcement". I wholeheartedly support any such measures which the Commission will take in that regard.

VIII. REQUIREMENTS FOR TELEGRAPHY EXAMINATION

Samuel Morse invented the electric telegraph and a system of dots and dashes symbolizing letters and numbers. In 1844 he sent the first telegraphic message from Baltimore, MD to Washington, DC. After 154 years of use, I think it is time for the amateurs to forget the past and recognize that Morse has been

surpassed by other, more effective, means of communication. In the early days of radio, amateur stations were often better equipped and produced better signals than commercial and government stations. The amateurs were given 200 meters and higher as those frequencies were considered worthless for communications. To the surprise of the "experts", amateurs were innovators and proved the value of those frequencies. However, about the last major innovation for which an amateur can take credit is the development and use of single-sideband audio transmission a half-century or so ago. With few exceptions, the ham radio community has remained mired in "traditional" technology, i.e., enamored with continued emphasis on the use of Morse.

The typical amateur is ignorant of contemporary communications methods--which could prove a great shortcoming in times of a major disaster. If pressed into service using a community's trunked radio system, how many amateurs understand the concepts of such a system? Suppose a community turned over a satellite telephone terminal to the amateurs to relay messages, and asked them to move it from one location to another and aim it correctly at the satellite. Most satellite dish installers could do it, but the amateurs would have to tell the municipality that they were not familiar with the technology. Oh, but they (may) know Morse--which is about as useful as knowing how to drive a team of mules.

While I don't know why the ITU mandated knowledge of Morse for licensing to operate in the HF bands, I do know that several countries rebelled against that mandate. Japan has issued "no-code" licenses for low-power operation on 10 meters for years. Between 1982 and 1986, Spain granted HF licenses without Morse testing. Pressure from England and some other European countries, regarding license reciprocity, coerced Spain into reestablishing Morse testing. The South African Radio League on 03 October 1998 stated that "...there exists no good

argument in favor of retaining Morse Code as the only qualifier for Amateurs to have unrestricted access to the HF bands". (I've yet to understand why I had to pass 20 wpm Morse in order to have full phone privileges.) Interestingly, the two license classes that permit HF operation in South Africa require 5 wpm (Class B) and 12 wpm (Class A), which are the code speeds recommended by the ARRL in its proposal for license restructuring. But South Africa has found that it's not working. Is the ARRL blind to this fact?

An Extra Class friend of mine recently met with a group of students in the hope of establishing a club and station at their school. When he mentioned the need to pass a Morse test, the youngsters asked "Why?" He couldn't give any rational answer other than "It's required". That rather well ended the session and, obviously, with a negative outcome. We cannot afford to turn off the younger people who are desperately needed to invigorate this hobby (service) dominated by old people who will no longer be alive 20 or 25 years from now. We must attract new blood into amateur radio, and the continued mandatory testing in 154-year-old technology just will not do it. I pray that the Morse requirement will be dropped at the World Radiocommunications Conference scheduled for 2001! In the meanwhile, the United States better wake up to the fact that we're rapidly becoming out of step with the rest of the world in this issue.

IX. MORSE WAIVERS FOR HANDICAPPED

I disagree with the ARRL's suggestion that VECs request personal medical information on the candidate's disability. That is privileged information--not public. I know of one VE team which was almost taken to court because they questioned an exemption certificate. Therefore, this has become a sensitive subject.

I favor use of only 5 wpm Morse for all license classes until the Morse requirement is finally eliminated.

X. CHANGES TO WRITTEN EXAMINATIONS

While the written examinations are intended to prove that the candidate has the proper technical and operational skills, I believe that revisions should be made in the emphasis given to certain topics. A person can pass the written exam with a perfect score, yet prove to be a very poor operator on the air. In Jordan, a newly licensed operator must first make a number of on-the-air contacts under direct supervision before he receives his station license. In Ethiopia, new licensees operate the club station, ET3AA, under supervision of their mentors in order to learn proper operating techniques. Studies for licenses should give more attention to proper operating.

I believe that strong emphasis should be given to knowledge of the FCC rules, understanding of antennas, operating procedures and competency in English. (I find it amazing that so many American operators just cannot understand the basic English-language instructions given by DX stations. Such as "Listening for Ones only", "Listening 5 up", "Who's the station with XY in the callsign", etc. The Japanese operators put Americans, and the rest of the world, to shame with the discipline which they show on the air!) Some discipline must be implanted into both new and many "old timers".

I cannot see the use of testing in technical topics of which the vast majority of amateurs will never be exposed. The days of "home-brewing" are gone, as are the days when the average amateur could repair his own equipment. The use of microprocessors, miniaturized components, surface-mount technology, etc. rather well ended it, and we all send our equipment back to the manufacturers'

service centers when something quits working. Like it or not, we are all "appliance operators" nowadays, with the exception of those few who utilize what remains of tube-type equipment.

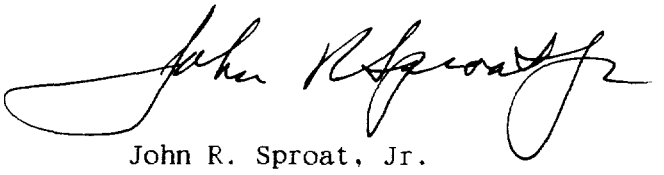
I therefore support reduction or elimination of testing in such subjects as "electrical principles as applied to amateur station equipment", "amateur station equipment circuit components", and "practical circuits employed in amateur station equipment".

In their place I suggest expanded testing in digital communications, RTTY, digital signal processing, satellite communications, ATV communications, interfacing computers with radios, etc. Study for such subjects would expand the amateurs' knowledge of contemporary communications practices and, perhaps, expand their interests in such modes.

CONCLUSIONS

In conclusion, I appreciate the opportunity to express my personal beliefs to the Commission. I know that the Commission will be taking action in the restructuring process, and I believe that it will be positive action. To be otherwise will virtually spell the end to Amateur Radio as we know and enjoy it.

Respectfully submitted,



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